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## Confronting civil war: the case of risk managing strategies in South Sudan in the 1990s

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## Abstract

Civil wars have become common and widespread. Africa has the highest incidence of intense civil wars and occurrence of civil wars is increasing. Civil war harms rural livelihoods, increasing food insecurity, vulnerability and poverty. Because of the nature and complexity of civil wars, there is limited understanding of how people survive in such circumstances. This paper attempts to offer a nuanced understanding of the risk management strategies adopted by households exposed to prolonged conflict and the outcomes of these strategies in terms of vulnerability. The main focus is on counterinsurgency warfare, both exogenous and endogenous. The main thesis of this paper is that households exposed to prolonged conflict undertake risk management strategies that are effective under certain conditions and less effective in other settings. While a negative relationship between wealth and vulnerability is found in the context of exogenous counterinsurgency warfare, a positive relationship between wealth and vulnerability is observed in the context of endogenous counterinsurgency warfare, with the non-poor becoming more vulnerable than the poor. This difference is attributed to the nature and characteristics of counterinsurgency warfare. The findings of this paper may have some value for informing policy decisions and practical approaches to rural livelihoods during prolonged conflict, particularly in areas of peace-building, food security, social capital, development and targeting of food aid.

## Introduction

Civil wars have become common and endemic in many African countries, particularly since the end of the Cold War. Africa has a higher incidence of intense civil wars than any other continent. The incidence has also increased during the last two decades, while it has fallen or remained static in other continents. This upsurge of civil wars in Africa has harmed the livelihoods of rural communities, resulting in increased vulnerability and poverty. Civil war is now as the leading contributory cause of vulnerability in much of Africa (Devereux, 2000). Out of the 22 countries identified to be in protracted crisis by FAO (2010), 17 are in Africa and most of them are frequently in a **conflict or “no war–no peace” situation**.

Rural communities adopt a wide range of livelihood strategies to deal with risks under peacetime conditions. Jodha (1975), for example, showed how households in India facing food deficit adopted various coping strategies, including curtailment in consumption or “choosing to starve” rather than selling their assets. Studies of African famines in the early 1980s showed that households faced with food deficit or shocks tended to follow a sequenced response aimed at conserving assets (Swift, 1989; Devereux, 1993).

Despite this wealth of knowledge of livelihood strategies under peacetime conditions, rural development literature contains no record of research into livelihood strategies in the context of civil war. Because of the nature and complexity of civil wars, there is limited understanding of how people in such environment are surviving. This paper is an attempt to provide a nuanced understanding of livelihood strategies adopted during civil war and to explore options for supporting such strategies. It is hoped that this paper will contribute to improving our understanding of resilience in the context of civil war as well as providing policy options to make aid intervention more effective.

## Risk–livelihood approach: a framework for household vulnerability analysis

The risk–Livelihood approach (Figure 1) used in this paper was developed by Deng (2003) to investigate the dynamic process of risk events, household livelihood assets, risk management process using livelihood strategies and the resultant livelihood outcomes in the context of civil war. Unlike other approaches, this framework starts with risk events and their characteristics rather than with assets. Asset status (owned, controlled, claimed or accessed) of households is regarded as the basic livelihood building blocks, and thus fundamental to understanding **households’ risk-related behaviours**, the strategies they adopt for survival and their vulnerability.

The framework identifies two critical periods of risk management that constitute the basis for human reaction to risk and its management: 1) the period before the occurrence of a risk event and 2) the period after its occurrence. **As the household’s reaction to risk and the way in which it manages risk primarily depend on the assets available**, risk management has been narrowly perceived as being synonymous with an asset-based management approach. In contrast, the risk–livelihood approach suggests that risk management starts with households’ perceptions about risk events. Households adopt *ex ante* risk management strategies to reduce the anticipated adverse effects of risk events on their livelihoods, and *ex post* livelihood strategies to cushion the actual adverse effects on their consumption and well-being.

In the context of civil war, counterinsurgency warfare has been identified as having a greater effect on rural livelihoods than macro-level civil war. Two types of counterinsurgency warfare have been identified, exogenous and endogenous. Endogenous counterinsurgency warfare is difficult to confront as it emanates from within the communities. Given that counterinsurgency

warfare targets the asset-base and livelihoods of the communities within which the insurgents operate, counterinsurgency warfare is triggered by household assets (Figure 1). Equally, there is an interaction between counterinsurgency warfare and drought (Figure 1).

## Livelihood strategies during civil war

In assessing livelihood strategies during civil war, it is important to understand the way with which the war is fought and conducted. Much of the human devastation caused by civil war is the result of the way the war is conducted. Counterinsurgency warfare commonly involves intense predatory behaviour of soldiers and their associated militias.

Following independence, the leaders of Sudan adopted counterinsurgency warfare to suppress the civil wars waged by communities whose political aspirations had not been met by the independence arrangements. The government lacked the means for effective and disciplined counterinsurgency and resorted to recruiting civilians into unpaid militias (Keen, 2000). In Southern Sudan, the second civil war started in 1982 and reached most rural areas by 1990. The Bahr el Ghazal region was the stronghold of the Southern rebellion and hence was the focus of counterinsurgency warfare in the 1990s. This counterinsurgency was initially waged by militias mainly composed of northern Arab pastoralists.

The situation in Bahr el Ghazal worsened after 1991 when divisions erupted within the main **rebel movement, the Sudan People's Liberation Movement (SPLM), which resulted in a splinter group** mainly composed of Dinka and Nuer. This splinter group joined forces with the government to further intensify counterinsurgency warfare in Bahr el Ghazal. Unlike the raids of the Arab militia that were exogenous and occurred during the dry season, the counterinsurgency warfare waged by the Dinka and Nuer militias was endogenous and conducted year round..

The unique characteristics of Bahr el Ghazal region and its experience in the 1990s made it ideal for assessing livelihood strategies during civil war. The period covered by the study is the 1990s, with the pre-war period used as a baseline to gauge changes and trends in livelihood strategies. The data used in this paper are from Deng (2003). People in the area saw counterinsurgency warfare as a greater threat than direct war or natural disasters and diseases.

Table 1. Community perceptions of sources of risk in Bahr el Ghazal, the Sudan, during the 1990s.

Main sources of risk	Community perceptions (proportional %) of sources of risk	
	Abyei	Gogrial
Dinka militias	17	68
Arab militias	62	9
Nuer militias	13	11
Drought	8	12
War between SPLM and GoS	0	0
Diseases (human/livestock)	0	0

SPLM – Sudan People's Liberation Movement. GoS – Government of Sudan.

Because of the lack of secondary socioeconomic household data, questionnaire-based household surveys (about 211 households in Abyei and 205 households in Gogrial) and community surveys (separate focus group discussions with men and women) were used to

gather primary data for assessing **people's** livelihood strategies during civil war. This paper presents findings relating to risk-reduction and risk-mitigation strategies.

*Livelihood risk-reduction strategies: reducing susceptibility*

Sources of livelihoods were analysed and typologies of livelihood diversification were constructed as suggested by Ellis (2000:214) to assess the status of livelihoods diversification.

Changes in sources of livelihoods during civil war

Before the current civil war, the Dinka economy in Bahr el Ghazal was based on transhumant animal husbandry, agriculture, fishing, trade and a limited dependence on gathering (Deng, 1999). During the civil war, communities exposed to exogenous counterinsurgency warfare in Abyei did not change their sources of livelihoods markedly (Figure 2), but those in the Gogrial area, which were exposed to endogenous counterinsurgency warfare, changed dramatically, reducing farming and livestock rearing activities and replacing them with gathering of wild foods (Figure 3).

Figure 2. Livelihood activities in the Abyei area of Bahr el Ghazal, the Sudan, before and during civil war.

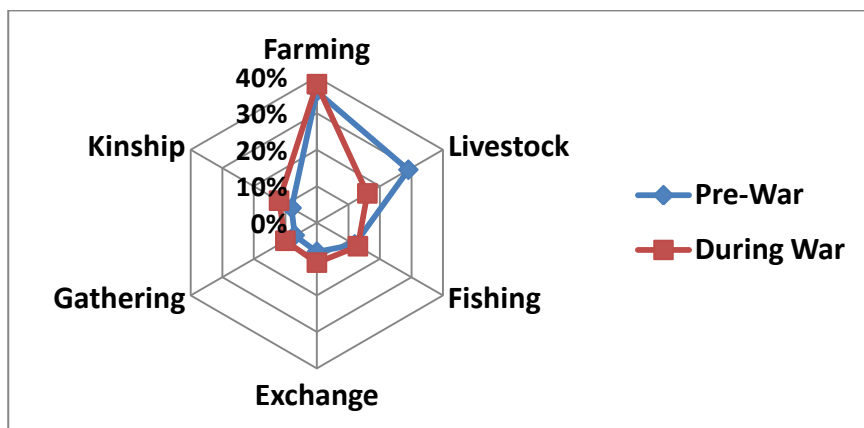
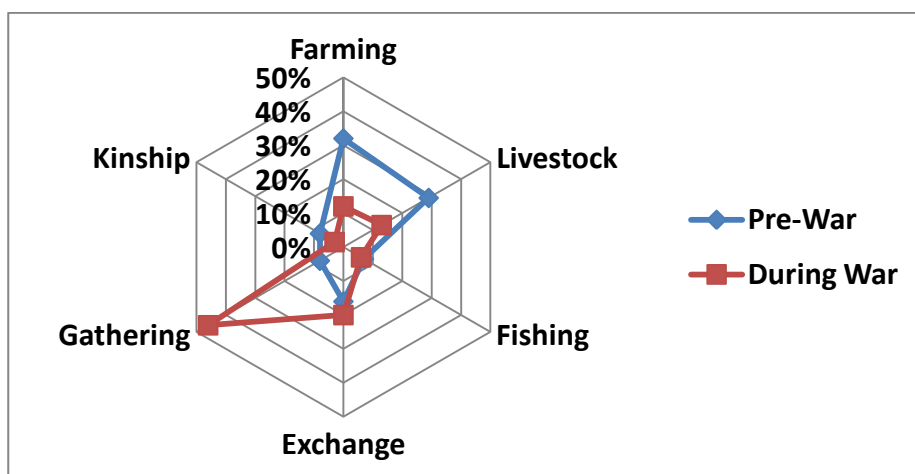


Figure 3. Livelihood activities during war in Gogrial area of Bahr el Ghazal, the Sudan, before and during civil war.



Changes in primary livelihood activities in the 1990s

Households were classified according to their predominant livelihood activities, following the approach developed by Ellis (2000: 214) (Table 2).

Table 2. Classification of households in Bahr el Ghazal, the Sudan, according to predominant livelihood activities in the 1990s before and during the civil war.

Research community	Period	Predominant household livelihood activity				Total
		Agro-pastoralist	Farming	Pastoralist	Trading	
Abyei	Pre-war	185 (88%)	13 (6%)	0 (0%)	13 (6%)	211
	1990s	166 (79%)	13 (6%)	32 (15%)	0 (0%)	211
Gogrial	Pre-war	205 (100%)	0 (0%)	0 (0%)	0 (0%)	205
	1990s	120 (59%)	85 (41%)	0 (0%)	0 (0%)	205

In Abyei, trading disappeared as a livelihood activity in the 1990s, while pastoralism emerged as a new livelihood activity, agropastoralism declined and farming remained the same (Table 2).

Households that adopted pastoralism in the 1990s were agropastoralists during the pre-war period, i.e. they preferred specialization to diversification of livelihood strategies. However, the disappearance of trading as a specialized livelihood strategy indicates that this preference for specialized livelihood strategies does not apply in all instances. More middle-income and non-poor households adopted pastoralism than did poor households. This suggests that poor households tend to diversify more than non-poor households, particularly in the context of exogenous counterinsurgency warfare. This finding challenges the conventional wisdom that diversification is positively related to level of income (Moser, 1998), at least in the context of exogenous counterinsurgency warfare. Generally, farming tends to be riskier than pastoralism in the context of exogenous counterinsurgency warfare, as it requires households to be sedentary, which makes them more susceptible to counterinsurgency raids (Little, 2003).

In Gogrial, all households were agropastoralists in the pre-war period, but 41 percent of the sample households resorted to pure farming as their primary livelihood activity in the 1990s (Table 2). The endogenous counterinsurgency activities of the Dinka militias in Gogrial in the 1990s precluded any attempt to possess or acquire livestock, which left households with no other choices except farming and gathering of wild foods. In spite of this shift towards farming, the contribution of crops to the overall household livelihood declined considerably (Figure 3). This shift from agropastoralism to farming occurred across all wealth groups. This clearly suggests that households exposed to endogenous counterinsurgency warfare are less likely to diversify than are those exposed to exogenous counterinsurgency warfare.

### Permanent migration

Rural migration is a recognized risk management strategy (Siegel and Alwang, 1999). Households exposed to risk events commonly use permanent or seasonal migration to reduce or mitigate risks to their livelihoods. Before the civil war in South Sudan, seasonal labour migration used to play an important role in the livelihoods of the Dinka communities in South Sudan. The monetization of the Dinka economy in the 1970s encouraged a new pattern of labour migration to western Sudan. The later rains in western Sudan allowed Dinka farmers to migrate there after they had completed their own field work. The Dinka also engaged in other off-farm employment activities in northern Sudan during the pre-war period.

This seasonal agricultural labour migration was disrupted by the eruption of civil war and the intensification of counterinsurgency warfare in northern Bahr el Ghazal in the 1980s and almost ceased in the 1990s. This seasonal migration was replaced by permanent migration of some

household members to the major towns and cities of northern Sudan, particularly among households in Abyei (Table 3). Households in Abyei took advantage of their proximity to northern Sudan to send household members to northern Sudan for employment and education, and by doing so reduced the impact of counterinsurgency warfare on their livelihoods. In general, permanent migration was higher in non-poor households than in households of other wealth ranks (Table 3).

Table 3. Number of members of households in Abyei and Gogrial, Bahr el Ghazal, the Sudan, that migrated permanently in the 1990s.

	Mean number of household members permanently migrating in the 1990s			
	Initial household wealth status			
Research community	Poor	Middle	Non-poor	Mean
Abyei	2.6	4.12	4.58	4.07
Gogrial	0.61	0.54	0.76	0.62

Most household members who migrated permanently are women and children. Women are perceived as neutral and less harmful and suspect, which allows them to move freely across and between fighting parties. Besides taking care of children and engaging in casual labour work in northern Sudan, the Dinka women became the only link sustaining the unity of families divided by the civil war in Sudan.

#### *Risk mitigation strategies: reducing potential impact*

Risk mitigation strategies include livelihood diversification strategies, such as asset portfolio management, insurance and hedging. Management of portfolios of assets and livelihood activities includes the diversification of assets and livelihood activities, the holding of stock and investment in social capital, while insurance includes marriage and other family and community arrangements. This section focuses on farming and livestock management, two of the most important livelihood activities for the Dinka. Holding of stock (livestock and food) and social capital as precautionary savings are also discussed.

#### Farming and crop production

Dinka households diversify their crop production activities to mitigate the effects of risk events. This diversification includes enterprise diversification (planting different crops and intercropping), spatial diversification (planting in different fields), temporal diversification (staggered plantings) and varietal diversification (e.g. use of drought-resistant varieties).

#### *Enterprise diversification*

Households in Gogrial continued to plant the same varieties and crops in the 1990s as they did during the pre-war period but with slight changes in proportions of land allotted to each crop. In Abyei, however, there was a dramatic change in the pattern of sorghum cropping. Prior to the civil war, households three different types of sorghum: an early-season crop using early-maturing varieties (*ngai*) harvested in August, later-maturing varieties (*ruath*) harvested in October, and a late-season crop from regrowth of *ngai* and *ruath* crops or replanting (*anguol*). The *anguol* crop constituted about 30 percent of the harvest (Huntington et al., 1981). However, during the civil war the activity of the Arab militias was at a peak during the planting time for *ngai* and *ruath* crops, and as a result farmers in Abyei focused their efforts on the *anguol* crop,

when militia activity was less. As a result, sorghum production actually increased during the civil war.

#### *Spatial diversification*

Households exposed to counterinsurgency warfare tended to plant fewer fields than during peacetime (Table 4). Civil war reduced both the number of fields planted and the difference between households of different wealth class in number of fields planted.

Table 4. Average number of fields planted by households in Abyei and Gogrial, Bahr el Ghazal, the Sudan, before and during civil war.

Research community	Period	Average number of fields planted by sample households			
		Initial wealth status of sample households			
		Poor	Middle	Non-poor	Average
Abyei	Pre-War	1.69	1.77	2.12	1.87
	1990s	1.34	1.25	1.41	1.31
Gogrial	Pre-War	4.00	4.58	4.82	4.55
	1990s	1.74	1.80	1.85	1.77

Thus, households in Abyei and Gogrial opted not to use spatial diversification as a livelihood strategy to confront counterinsurgency warfare.

#### *Access to Market*

Proximity to markets is a critical asset for managing risk. In the context of counterinsurgency warfare in Bahr el Ghazal region, access to markets that were in government-held areas played a crucial role in providing not only goods and services but also provided a platform for local conflict resolution. Market access for households in the Abyei area increased during the civil war as a result of the proximity of households to the main market in the government-held Abyei town. In contrast, market access for households in the Gogrial area declined.

The Abyei market is an important link between south and north and used to be one of the largest livestock markets in the Sudan. Its size declined during the civil war but it continued to be the major source of basic commodities supplied from the north to most parts of Bahr el Ghazal region. Vested economic interests in the market encouraged the fighting parties to cooperate and allow free movements of traders and the civilian population. While the government armed forces in Abyei town virtually monopolized the trading and market activities, the local rebel forces benefited from the high taxes levied on traders and individuals coming to the market. New markets also emerged in rebel-held areas, which facilitated interaction between Arab nomads and the Dinka communities and provided local conflict resolution mechanisms.

#### *Investment in physical assets and holding of stocks*

Physical assets are usually classified into productive assets, household assets and stocks. In the context of civil war, the most relevant category of physical assets for assessing livelihood diversification is the holding of stocks (livestock and food) as precautionary savings. The holding of stocks is recognized as the most common form of asset diversification for risk management (Dercon, 1996).



## Changes in sorghum storage

Generally, the holding of food stocks as precautionary savings plays an important role in risk management, as they have the advantage of being fairly liquid, and can be consumed or sold to smooth consumption. However, these attributes of food stocks also make them targets and susceptible to militia raids. Grain stocks, in particular, are susceptible to militia raids because they are difficult to hide or move, which also makes managing them, particularly storing them, arduous. The risks to grain stocks caused Dinka households in southern Sudan to drastically change their traditional storage system during the civil war.

Before the war, Dinka households in Abyei traditionally stored grain above ground, but since the start of the civil war they have been storing it below ground. This allowed them to conceal their grain stocks from Arab militia raids, but increased the labour involved in storing and handling the grain. Generally, sorghum that is harvested in November/December must be put into storage by early January, prior to the arrival of Arab militias in January/February. Achieving this requires collective action and sharing of roles between men and women. As a result, mutual labour assistance clubs (*mat*) and beer parties became more institutionalized and more widely practised in the 1990s. Once stored, the grain must remain untouched until the rains start in April/May, when Arab nomads start returning northwards. The opening of these underground stores in May also coincides with the period of high demand for sorghum in the southern neighbouring Twic area and hence when prices are highest.

In contrast, households in Gogrial were less successful in holding their stocks in the 1990s. Households in the Gogrial area tried various measures to reduce losses to Dinka militia raids, including underground storage and storing in trees in the forest, but none was successful. The failure of stock storage in Gogrial is largely related to the endogenous nature of counterinsurgency warfare there, as the attackers (Dinka militias) are aware of the newly adopted storage strategies.

## Livestock management

Livestock are both productive assets and stocks. Unlike grain, livestock are mobile, which makes them useful for reducing the effects of risk events (Little, 2003). As a result, livestock are popular form of precautionary savings and an effective means for household risk mitigation.

Animal husbandry, particularly cattle herding, is the primary economic activity of the Dinka. However, the significance of cattle goes beyond their economic value, as they are used to maintain social relations, religious values and political institutions. Despite the monetization of the Dinka economy, and even wars, cattle are still pivotal to Dinka livelihoods. The management of livestock during the pre-war period was organized around regular and seasonal migration between cattle camps in swampy areas (*toic*) and permanent settlements or villages (*baaŋ*). This maximized the livestock production and minimized the tension between animal husbandry and crop production. Cattle are generally kept in collective herds except for a few cows kept permanently at home for milk. As a single family or household cannot protect its cattle on its own, the cooperation of territorial groups – either a section of the tribe or a subsection – becomes necessary. Normally cattle are directly managed by the family members, mainly youth, with a few cases where cattle are entrusted to members outside the family.

In the Abyei area the migration pattern changed with the civil war, with cattle being kept more in new swampy areas in the south and west of Abyei far from permanent settlements. This reduced households' access to livestock products. During the counterinsurgency warfare, cattle owners had to either directly manage their cattle or entrust some animals to close relatives or friends. The Dinka normally entrust livestock to others (a practice known as *kueŋ*) to minimize the risk of diseases, disguise their wealth to avoid cattle being claimed in discharge of kinship or

other obligations, improve cross-breeding, create **space for one's herd, assist relatives or friends**, and to accumulate independent and concealed wealth, particularly among young men (Deng, 1971).

According to the risk literature, it would be rational to increase the practice of entrusting or loaning cattle to others during counterinsurgency warfare (Posner, 1980). During the civil war, *kuei* declined markedly in favour of direct management of livestock among households exposed to endogenous counterinsurgency warfare in Gogrial. In contrast, *kuei* slightly increased in the Abyei area, with livestock mainly entrusted to maternal relatives, who are more trusted in Dinka society than paternal relatives or friends. The reason for this increase in *kuei* among households in the Abyei area is that the exogenous counterinsurgency warfare experienced by this community strengthened trust and specialization within the community. Poor households with few livestock entrusted their livestock to households that had adopted a pastoralist livelihood away from the Abyei area and focused their efforts on farming. This explains the apparent decline in the contribution of livestock to household livelihood in the Abyei area (Figure 2).

#### Hedging: forward bartering of sorghum for livestock

Despite the apparent decline in the contribution of livestock to household livelihood in the Abyei area in the 1990s, nearly half of households bought more cattle during the civil war than they had before the war while only 24 percent of households sold more livestock (Table 5). In contrast, 92 percent of households in the Gogrial area sold more livestock during the 1990s than they had before the civil war.

The high purchases of livestock in Abyei area are linked to a substantial increase in sorghum production in the 1990s, with sorghum grain being bartered for livestock from Twic area. As previously noted, changes in the system used for storing sorghum resulted in the release of grain stocks in the Abyei area at the beginning of the rainy season, when demand for sorghum is high in the neighbouring Twic area. During this period, households in the Abyei area want to dispose of their stored sorghum as quickly as possible to avoid storage losses during the rainy season, but households in the Twic area are concerned about the high prices of sorghum and the low prices of livestock at this time. To address these concerns, the households and farmers in Abyei and Twic resorted to forward bartering of sorghum for cattle, with prices fixed immediately after harvest in November/December, and actual payments being made in May/June. This stabilized bartering prices, helped farmers in the Abyei area to dispose of their sorghum stocks in a timely manner, and allowed households in the Twic area to sell their cattle at reasonable prices and terms of trade. This encouraged households in the Abyei area to specialize in and increase sorghum production while storing the wealth generated in the form of cattle.

Table 5. Level of livestock Sale in Abyei and Gogrial, in the 1990s compared with before civil war.

Research community	Livestock purchases in 1990s compared with pre-war periods	Level of Livestock Acquisition by Households			
		Initial household wealth status			
		Poor	Middle	Non-poor	Total
Abyei	Sold more	8 (28%)	24 (21%)	20 (29%)	52 (24%)
	No change	10 (35%)	31 (27%)	22 (32%)	63 (30%)
	Bought more	11 (38%)	58 (51%)	27 (39%)	96 (46%)
Gogrial	Sold more	27 (71%)	97 (97%)	65 (97%)	189 (92%)
	No change	9 (24%)	3 (3%)	2 (3%)	14 (7%)
	Bought more	2 (5%)	0 (0%)	0 (0%)	2 (1%)

### *Status of social capital: the level of kinship support in the 1990s*

The level of kinship support is used as a proxy for the level and status of social capital, particularly trust and cooperation, within the research communities and with their neighbouring communities during civil war in the 1990s. About 37 percent of sample households in the Abyei area experienced an increase in kinship support in the 1990s, compared with only 2 percent of sample households in the Gogrial area (Table 6).

The level of trust and cooperation within households exposed to endogenous counterinsurgency warfare (Gogrial area) was considerably eroded during the 1990s, with 94 percent reporting a decline in kinship support. The greatest decline in the stock of social capital in Gogrial area was felt by the non-poor households (97%), who were the immediate targets and victims of endogenous counterinsurgency warfare. The endogenous counterinsurgency warfare experienced in the Gogrial area created a climate of distrust and turned the community against itself, which resulted in weakened social capital. In contrast, only 39 percent of households in the Abyei area experienced a decline in social capital stock in the 1990s, as the common threat from Arab militias strengthened their internal cohesiveness, trust and cooperation. Marriages were also more common in families exposed to exogenous counterinsurgency warfare than in families exposed to endogenous counterinsurgency warfare.

Table 6. Level of kinship support in Abyei and Gogrial, Bahr el Ghazal, the Sudan, the 1990s compared with prior to the civil war.

Research Communities	Kinship support in the 1990s compared with pre-war periods	Initial household wealth status			
		Poor	Middle	Non-Poor	Total
Abyei	Decreased	9 (31%)	43 (38%)	31 (45%)	83 (39%)
	The same	10 (34%)	26 (23%)	14 (20%)	50 (24%)
	Increased	10 (35%)	44 (39%)	24 (35%)	78 (37%)
Gogrial	Decreased	34 (90%)	94 (94%)	65 (97%)	193 (94%)
	The same	3 (8%)	3 (3%)	1 (2%)	7 (4%)
	Increased	3 (8%)	3 (3%)	1 (1%)	5 (2%)

### Livelihood outcomes: the status of poverty in the 1990s

Transition and movement within and across various wealth groups was used to assess poverty in the 1990s (Deng, 2008). Household heads were asked to describe the wealth status of their households before and during the civil war. Poverty increased in both Abyei and Gogrial areas in the 1990s but the increase was greater among non-poor households and households exposed to endogenous counterinsurgency in Gogrial (Table 7).

Table 7. Change in wealth status among households in Abyei and Gogrial, Bahr el Ghazal, the Sudan, between the pre-war period and the 1990s.

Research community	Initial household wealth status	Household wealth status in the 1990s		
		Non-poor	Middle	Poor
Abyei	Non-poor	14 (6.6%)	44 (20.9%)	11 (5.2%)
	Middle	0 (0%)	81 (38.4%)	32 (15.2%)
	Poor	0 (0%)	3 (1.4%)	26 (12.3%)
Chi-square=78.64	Kendall's tau-b= 0.457	N= 211	I = 0.573	

Gogrial	Non-poor	0 (0%)	8 (3.9%)	59 (28.8%)
	Middle	(0%)	4 (2%)	96 (46.8%)
	Poor	0 (0%)	2 (1%)	36 (17.5%)
Chi-square = 4.15	Kendall's tau-b = 0.111	N = 205	I = 0.195	

The immobility measure (I, the sum of the shaded cells for each research community in Table 5, shows that about 57.3 percent of households in Abyei did not change wealth status in the 1990s, while about 19.5 percent of households did not change wealth status in Gogrial. While incidence of poverty generally increased during the civil war, households exposed to endogenous counterinsurgency warfare suffered more (Deng, 2008), in part because endogenous counterinsurgency warfare weakened the effectiveness of **households'** livelihood strategies.

## Conclusions and implications for policy and practice

The main contention of this paper is that households exposed to prolonged conflict undertake *ex ante* risk management strategies, and that some of these strategies are effective under certain conditions and are less effective in others. These differences can be attributed to the nature and characteristics of counterinsurgency warfare. While the nature of risk is important, the characteristics of risk are more important in understanding vulnerability in the context of civil war. The links between risk events and vulnerability in terms of susceptibility, sensitivity and resilience are summarized in Table 8. **The 'standard' pattern of vulnerability** normally observed in the context of drought is remarkably similar that observed in the context of exogenous counterinsurgency warfare (Abyei), with non-poor becoming less vulnerable than the poor.

Table 8. Summary of links between risk events, wealth status and vulnerability.

Risk event	Household vulnerability in the 1990s		
	Susceptibility	Sensitivity	Resilience
Endogenous counterinsurgency (Gogrial)	More among non-poor households than poor households	Higher among non-poor households than poor households	Low among all households, particularly among non-poor households
Exogenous counterinsurgency (Abyei)	Random pattern among all households, but slightly more among non-poor households	Higher among non-poor households than poor households	High among all households, particularly among non-poor households
Drought (standard pattern)	More among poor households than non-poor households	Higher among poor households than non-poor households	Higher among non-poor households than poor households

Source: Deng (2003).

The pattern of vulnerability to endogenous counterinsurgency warfare (Gogrial) differs markedly from scenarios usually presented in the literature, in that there is a clear and surprising positive link between initial level of household wealth and vulnerability, with non-poor becoming more vulnerable than poor. This is mainly due to the distinctive characteristics of endogenous counterinsurgency warfare, particularly symmetric information, year-round duration, specificity,

high correlation with other risk events, limited past experience and postperiod threat. The characteristics of non-poor households, particularly their limited capacity to absorb shocks, susceptibility to trauma and inflexibility to adapt to new livelihood approaches such as reliance on wild food collection, all contributed to their increased vulnerability.

### *Peacebuilding*

The way civil war is conceptualized and perceived has an important bearing on the ways in which we can prevent it, and on opportunities for promoting and sustaining peace. If we accept a monocausal account of civil war, such as greed or predation, rather than the complex **'grievance' diagnosis, the apparent policy implication** is that we should make it harder for rebel organizations to become established, and addressing objective grievances is seen as ineffective in preventing civil war (Collier, 2000:15). **The analysis of the causes of Sudan's civil war** demonstrates that the civil war is not senselessly driven by greed, but it was primarily caused by factors at international, national and micro levels (Keen, 1994; Deng, 2002). Rather than only making it harder for rebel organizations to become established, it is equally important to make it harder for actors at international and national levels to ignite and nurture civil war. The lack of a comprehensive understanding of the root causes of most civil wars largely explains the stalemate in peacebuilding efforts and the missing of substantial opportunities to resolve these conflicts. One important policy implication for the resolution and prevention of civil wars is to view civil war as a complex phenomenon that needs to be thoroughly understood in its multidimensional and specific context.

The perceptions of the communities of Bahr el Ghazal about the sources of risk clearly demonstrate that the conduct of the civil war, particularly counterinsurgency warfare, has a greater effect on their livelihoods than does conventional warfare between the rebels and the government. One policy implication is that, while peace efforts tend to focus on the main warring parties (rebels and government) at national level, it is equally important that peacebuilding efforts address these inter- and intracommunity conflicts.

Specifically, donors and nongovernmental organizations (NGOs) should support traditional mechanisms of conflict resolution and grassroots peace initiatives that will eventually contribute to the settlement of the major civil war between rebels and the government. In particular, there is a need to facilitate regular tribal and intercommunity peace conferences between Dinka, Nuer and Arab nomads to resolve traditional disputes over pastures and water. For example, the grassroots peace initiative between Nuer and Dinka that was facilitated by civil society organizations (churches and youth organizations) not only reduced tension and intercommunity conflict, but also contributed to reconciliation between the southern warring parties. In addition, during the postconflict period, the government and NGOs should not promote only the culture of achieving justice in healing the wounds created by war, but rather should promote the traditional culture of reconciliation and forgiveness. It is likely that, when a peace agreement is signed by the warring parties, a new wave of conflicts will erupt among communities if efforts are not exerted by the government and aid agencies to alleviate these hidden tensions.

### *Development alongside relief during civil war*

There is an ongoing debate among policy-makers and analysts about the relationship between **'relief' and 'development,' particularly in the context of civil war**. The debate about applying the principle of linking relief and development in the context of civil war has come under increasing criticism, to the extent that many consider it a dead issue or at least one they would prefer not to discuss (White and Cliffe, 2000). Yet, the discussion around the need to broaden aid objectives

from support purely for survival to support for rehabilitation or development is still very much alive in the context of civil war. One apparent criticism of the debate about the relief–development divide is that it is constructed from the point of view of aid programmes, with little relevance to the concerns of intended beneficiaries. Moreover, it also pays insufficient attention to context. It thus often seems to be stuck at the level of generalities and has subsequently suffered from inadequate contextualization, failing to recognize that there is a wide range of variation in the level of humanitarian crises across communities in war zones. Deng (2006), for example, found that access to education and health in southern Sudan was better during the civil war than before it.

The case studies covered in this paper clearly demonstrate the variation in the level of **communities' exposure to counterinsurgency warfare**, ranging from communities that are in relatively secure and stable areas to those that are in frontline areas with chronic insecurity. Within communities exposed to counterinsurgency warfare, households exposed to exogenous counterinsurgency warfare were able to adopt more effective livelihood strategies than those exposed to endogenous counterinsurgency warfare. This variation among communities in terms of their exposure to civil war and their livelihood strategies and vulnerability makes it extremely difficult to make any generalization. The innovative livelihood strategies adopted by households in the Abyei area require support from **'development interventions,'** whereas households exposed to endogenous counterinsurgency warfare in the Gogrial area require pure relief intervention. Clearly, **the choice of 'relief intervention' or 'rehabilitation/development intervention' in the context of civil war depends on a better understanding of the context.**

The comparative analysis of livelihood strategies adopted by households exposed to different types of risk events highlights variations in the choice and effectiveness of livelihood strategies depending on context. For example, while some livelihood strategies, such as diversification, work well in risk contexts such as drought, they may not be effective in other risk contexts, such as counterinsurgency warfare. This reiterates the need to understand the context within which livelihood strategies operate.

### *Investment in social capital during civil war*

Social capital may be eroded by civil war in certain contexts and strengthened and deepened in other contexts. Thus, there may be opportunities to enhance social capital in the midst of civil war. However, in most, external actors with a limited understanding of community-level dynamics and social relations assume that social capital is a casualty of conflict, and hence tend to focus on engineering social capital through indigenous NGOs and civic organizations.

In the case of southern Sudan, this resulted in efforts to engineer civil society through support for handpicked indigenous NGOs. Besides encouraging pro-peace or anti-rebel NGOs, the external actors aimed at reducing the size and influence of the **rebels'** institutions, which were seen as impeding formation of social capital, rather than engaging with them to promote good governance. While focusing on a few NGOs and civic organizations may be the easiest way to influence social capital in the short run, such organizations may not be especially important in the long run (Edwards, 1999).

The variation in social capital observed among households exposed to different types of counterinsurgency warfare shows the need to map the status of social capital to identify intervention that may contribute to an enabling environment for social capital formation. For example, in the Abyei area, where intracommunity solidarity strengthened during the civil war, efforts should be focused on intercommunity solidarity, particularly between the Dinka and their Arab neighbours, while consolidating intracommunity solidarity. The Gogrial area, where there

has been a rapid depletion of social capital as a result of endogenous counterinsurgency, may require a different mix of interventions that focuses on intracommunity solidarity.

Clearly, any external intervention should be based on a comprehensive analysis and understanding of the context in which it is to be applied and should aim at creating an enabling environment for formation of social capital, rather than create novel mechanisms of social capital formation. For example, during the 1990s, and specifically during the famine in Bahr el Ghazal in 1998, external actors established women-led relief committees to distribute food aid. This externally imposed relief committee, which reflected **the outsiders' perception of transparency, women's empowerment and vulnerability, undermined the existing traditional structure that takes care of vulnerable people and even made women involved in targeting food aid socially vulnerable.**

During the postconflict period, the government should work to rehabilitate the traditional social support networks as well as develop formal social security systems for the war-affected population, particularly widows, widowers, disabled people and orphans. The government should also survey social capital immediately after the peace agreement in order to map the status of social capital and to guide its social security safety nets programmes.

### *Be mindful also of the non-poor during civil war*

Households that were initially non-poor were the main losers in the civil war, particularly in the context of counterinsurgency warfare. The case study of the Gogrial area, in particular, shows a positive association between wealth and vulnerability. This finding, besides challenging the commonly held view that wealthier households are less vulnerable to risks, has an important policy implications for relief and development efforts during war and postconflict periods. One obvious policy implication is that the targeting of relief assistance should be guided by a thorough understanding of the current dynamics of poverty, rather than by knowledge of the pre-war situation, which might have changed dramatically during the civil war.

The incidence of poverty has increased dramatically during the current civil war in southern Sudan, particularly in areas affected by counterinsurgency warfare. This clearly shows the rapid erosion and depletion of the assets base of all households, including households that were initially non-poor. Addressing the needs of the war-affected communities requires a clear poverty-reduction strategy that aims at rehabilitating traditional agriculture and building up assets, particularly the restocking of livestock among the agropastoralist communities.

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Figure 1. Risk–livelihood strategies-vulnerability approach.

